Honorable EPA Regulators:

I am writing to urge you to review the health and epigenetic implications of Roundup formulations, and set a new low level of ADI for glyphosate as well as other toxic ingredients in the formulations. In the US, the glyphosate ADI is 1.75 mg per kg of body weight per day. Why is our ADI so much higher than that of 0.3 mg/kg bw/d in Europe? Even the ADI in Europe may not be good enough in view of present knowledge, as expressed by a group of renowned independent US scientists [1].

In addition to being a possible carcinogen, glyphosate is an endocrine disruptor [2,3]. Hormonal effects can occur at very low doses with a non-linear dependence on dose [4], and a safe limit cannot be predicted by classical high-dose toxicity studies.

Glyphosate adversely affects embryos and reproduction in animal studies, even at low doses [5,6].

While the "inert" ingredients in herbicides do not kill weeds, they can act synergistically with the active ingredient or can be toxic in their own rights. Polyethoxylated tallowamine (POEA), one of Roundup's inert ingredients, can kill human cells, particularly embryonic, placental and umbilical cord cells.[7]

I hope you will put the well-being of citizens above profits for Monsanto and other corporations. Thank you.

Sincerely,

Mei-Ling Stefan

2017 June 21, Sunnyvale, CA 94087

- [1] "Concerns over use of glyphosate-based herbicides and risks associated with exposures: a consensus statement" https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4756530/
- [2] "Glyphosate induces human breast cancer cells growth via estrogen receptors", https://www.ncbi.nlm.nih.gov/pubmed/23756170
- [3] "Republished Study: Long-Term Toxicity of a Roundup Herbicide and a Roundup-Tolerant Genetically Modified Maize", https://www.ncbi.nlm.nih.gov/labs/articles/27752412/
- [4] "Hormones and Endocrine-Disrupting Chemicals: Low-Dose Effects and Nonmonotonic Dose Responses", https://academic.oup.com/edrv/article-lookup/doi/10.1210/er.2011-1050
- [5] https://www.researchgate.net/publication/258409685 Teratogenic Effects of Glyphosate-Based Herbicides Divergence of Regulatory Decisions from Scientific Evidence
- [6] "Glyphosate-based Herbicides Produce Teratogenic Effects on Vertebrates by Impairing Retinoic Acid Signaling", Chem.Res. Toxicol. 23, 1586 (2010)
- [7] Weed-Whacking Herbicide Proves Deadly to Human Cells https://www.scientificamerican.com/article/weed-whacking-herbicide-p/